

**HIGHLIGHTS AND BREAKTHROUGHS**

**Tweed, Twins, and Holes: A link between mineralogy and materials science**

**WILFRIED SCHRANZ<sup>1,\*</sup>**

<sup>1</sup>University of Vienna, Faculty of Physics, Boltzmannngasse 5, A-1090 Wien, Austria

**Abstract:** The paper entitled “Tweed, Twins, and Holes,” by Ekhard K.H. Salje [2015, vol. 100(2-3)] gives a comprehensive overview on experiments, theory, and computer simulations of microstructures in ferroelastic and multiferroic minerals and synthetic crystals, with special emphasis on domain wall properties. Such materials are highly interesting for technological applications as well as from a more fundamental point of view, bearing a lot of open questions. Domain boundaries are nanometer-sized objects that very often exhibit physical properties quite different from the bulk. This can lead to completely new functionalities as compared to single domain crystals.

**Keywords:** Tweed, twins, holes, phase transitions